

WHAT IS CLAIMED IS:

1. A display apparatus comprising:
a plurality of display device, at least one of which is a semitransparent display; and

5 a fixing device for fixing the plurality of display devices to be placed along a front-rear direction on a viewer's line of sight each other, wherein a relationship between the spacing L(mm) between image planes of adjacent of the plurality of display devices and the length S(mm) of diagonal lines of the two display devices satisfies a condition
10 expression:

$$S/63.5 + 1.5 \leq L \leq S/12.7 + 7.0 \quad \dots (1)$$

2. The display apparatus according to claim 1, wherein the relationship between the spacing L and the length S satisfies a condition
15 expression:

$$S/50.8 + 2.0 \leq L \leq (3 \times S)/50.8 + 5.0 \quad \dots (2)$$

3. The display apparatus according to claim 2, wherein the relationship between the spacing L and the length S satisfies a condition
20 expression:

$$L = S/25.4 + 3.5 \quad \dots (3)$$

4. The display apparatus according to claim 1, wherein the spacing L is the spacing between light emitting surfaces of the two display
25 devices.

5. The display apparatus according to claim 1, further comprising an

imaging device for imaging the image plane of at least one of said two display devices at a predetermined position not located on the screen of said at least one of said two display devices.

5 6. The display apparatus according to claim 5, wherein at least one of the imaging device comprises a lens.

7. The display apparatus according to claim 6, wherein the lens is provided in correspondence with each of pixels of the two display devices
10 or with each of pixel blocks or pixel lines formed by a plurality of pixels.

8. The display apparatus according to claim 1, wherein the spacing L is an air-conversion optical path length between the two display devices.
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9. The display apparatus according to claim 8, further comprising an optical path length changing device for changing the optical path length.

20 10. The display apparatus according to claim 9, wherein the optical path length changing device comprises a transparent member having a predetermined refractive index.

11. The display apparatus according to claim 10, wherein the
25 transparent member is constituted by at least one of glass or a resin.

12. The display apparatus according to claim 1, wherein one of the

two display devices is a display device combined by a half mirror, and the spacing L is the difference between the length of an optical path for light transmitted through the half mirror to reach the other of the two display devices and the length of an optical path for light reflected by the half mirror to reach said one of the two display devices.

13. The display apparatus according to claim 12, wherein the sizes of the screens of the two display devices are equal to each other.

10 14. The display apparatus according to claim 13, wherein each of the display device except at least the one remotest from the viewer is formed by semitransparent display device.

15 15. The display apparatus according to claim 14, wherein the semitransparent display device comprises a liquid crystal display device or an electro-luminescent display device.